Test and Evaluation Working Integrated Product Team (T&E WIPT)

An Integral partner on the PM's Team

As of 8/17/09

Purpose

- **The purpose of this presentation is to provide PMs, and or program T&E leads, a tool to prepare and establish a T&E WIPT**
- **This presentation may be used as is, or adjusted with Service/Agency direction and guidance regarding establishing a T&E WIPT**

Outline

- What is a T&E WIPT
- Why is a T&E WIPT Needed
- T&E WIPT Membership
- T&E WIPT Charter
- What are the T&E WIPT Organizational Relationships
- What are the T&E WIPT Products
- References
- Point of Contact

What is a T&E WIPT

- **The T&E WIPT is a defined forum serving the PM, and PMO, as the test and evaluation subject matter experts responsible for supporting the PM, and other program WIPTs, on all aspects of a program's test and evaluation effort. This effort includes T&E program strategy, design, development, oversight, and the analysis, assessment and reporting of test results.**

- **The T&E WIPT should be established and chartered as early as possible during the Material Solutions Analysis phase so that it is involved in program strategy discussions and plans.**

What is a T&E WIPT (Continued)

- **The PM may form lower level functional working groups, who report to the T&E WIPT, to focus on specific areas such as integrated test planning, information assurance, SW T&E, reliability scoring, M&S development and Verification, Validation, and Accreditation (VV&A), and threat support.**

- **The T&E WIPTs primary focus areas through a program's acquisition process and phases are identified on the next chart**

T&E WIPT Focus Areas in the Acquisition Phases & Phases

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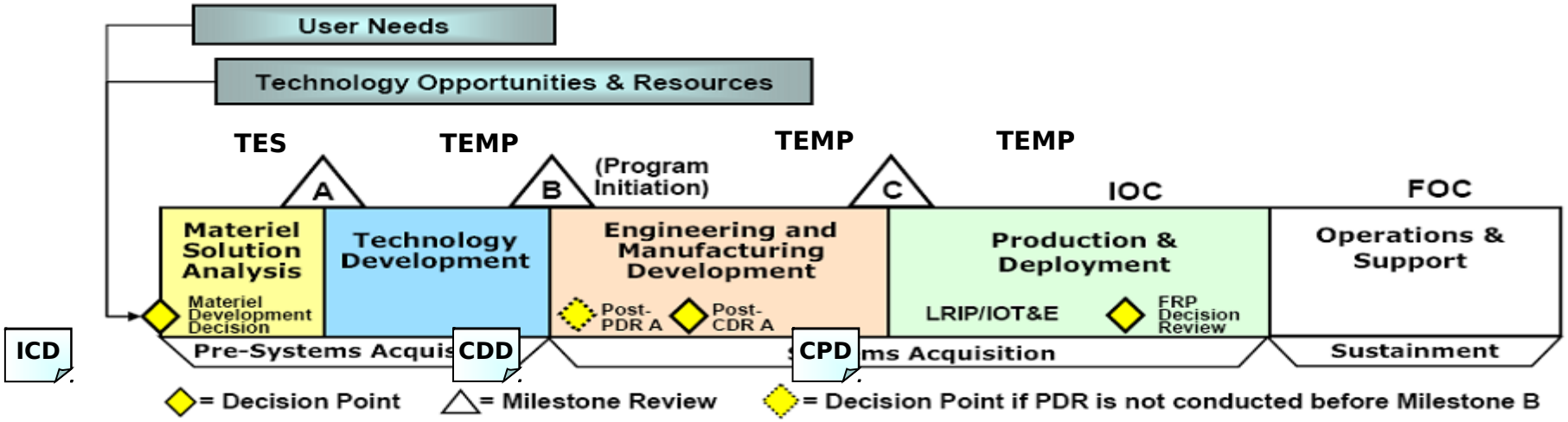

T&E WIPT Focus Areas

▪Technology Development Strategy (TDS) ▪Test Evaluation Strategy (TES) ▪ID emerging T&E capability requirements ▪ID T&E resources ▪Develop T&E requirements in RFP ▪Annual Report	▪Test and Evaluation Master Plan (TEMP) ▪Execute T&E Program ▪Provide T&E results for OIPT/DAB ▪CDD requirements for testability and evaluation ▪TRL Evaluation ▪T&E requirements in RFP ▪Annual Report	▪Test and Evaluation Master Plan (TEMP) ▪Execute T&E Program ▪Provide T&E results for OIPT/DAB ▪Support SE Tech Review (PDR) ▪CPD requirements for testability and evaluation ▪Define system capabilities and limitations ▪Discovery and deficiencies ▪Annual Report	▪Test and Evaluation Master Plan ▪Verification of corrections for deficiencies ▪T&E results for OIPT/DAB ▪OTRR ▪IOT&E ▪Annual Report	▪Follow-on DT and OT ▪Verification of corrections for deficiencies ▪Develop T&E programs to support upgrades, modifications, increments

T&E WIPT Membership

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WIPT Chair: PM, DPM, or Govt. T&E Lead. Must have T&E experience relative to the product/system

HQs/Sponsor/PEO representatives. Can speak for sponsoring Service/Agency

OSD DT&E & DOT&E representatives

Responsible and participating T&E organizations

Invited SMEs relative to the WIPT issue/topic

OTA(s) and other organizations involved in the program, such as JFCOM, especially if a SoS/FoS program

Functional representatives such as: NII, SW, M&S, IA, and JITC

Contractor / vendor as appropriate for type of discussions/decisions

Why is a T&E WIPT Needed

A T&E WIPT is needed to:

- **Provide a forum for all key organizations to be involved in the T&E effort.**
- **Develop and maintain the program T&E strategy.**
- **Develop and manage an integrated test program for M&S, developmental tests, and operational tests to support evaluations.**
- **Develop and maintain the Integrated Test Schedule.**
- **Identify and resolve issues.**
- **Document a quality TES/TEMP/Schedule as quickly and as efficiently as possible – necessitates that all interested parties are afforded an opportunity to contribute to the TES/TEMP development.**

T&E WIPT
"Do's" and "Don'ts"

- **Do invite Service headquarters offices to participate in the T&E WIPT**
- **Do obtain appropriate OSD office(s) involvement early, especially DT&E and DOT&E**
- **Do know T&E WIPT issues & be empowered**
- **Do hold program to the rigorous T&E process**
- **Do base positions on facts, vice emotions**
- **Do elevate an issue if unable to resolve within the T&E WIPT**

- **Don't dismiss T&E WIPT meetings as not important**
- **Don't dismiss T&E WIPT members' comments without reasoned debate**
- **Don't allow unresolved issues to fester within the T&E WIPT (that is, take extra effort to resolve one-on-one and face-to-face)**
- **Don't disband the T&E WIPT after TEMP approval**

T&E WIPT Charter

- **Getting WIPTs off to a good start is critical. A key activity is developing a charter.**
- **The charter documents the WIPT mission, membership, roles and responsibilities, products, and establishes the timeframe in which the effort is to be completed.**
- **The WIPT chairperson should draft the charter, be ratified by the membership at the outset of the WIPT, and approved by the program manager.**

T&E WIPT Charter (Continued)

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A charter should:

- **contain a clear mission statement, to include the specific purpose and objectives of the WIPT;**
- **provide recognition of the purpose of the WIPT in a larger context;**
- **identify the output product, process, or service to be provided;**
- **identify the customer or recipient of the output product, process, or service;**
- **identify the timeframe by which the product is to be produced, the process completed, or the service provided;**
- **identify WIPT membership, to include all the cross-functional disciplines necessary to achieve the objectives of the WIPT and to produce the product, complete the process, or provide the service;**
- **consider any need for training of the WIPT membership, particularly those new to the WIPT process;**
- **address membership performance objectives that characterize a high-performance WIPT;**
- **address product ownership and membership accountability;**
- **address the use of metrics as a means of creating and maintaining team focus;**

T&E WIPT Charter (Continued)

A charter should (Continued):

- provide for membership coordination and buy-in;
- embody:
  - **the three basic tenets of WIPTs:**
    - **The PM is in charge of the program.**
    - **WIPTs are advisory bodies to the PM.**
    - **Direct communication between the program office and all levels in the acquisition oversight and review process is expected as a means of exchanging information and building trust.**
  - **the roles and responsibilities applicable to all WIPTs:**
    - **Assist the PM in developing strategies and in program planning, as requested by the PM**
    - **Establish IPT plan of action and milestones (POA&M)**
    - **Propose tailored documentation and milestone requirements**
    - **Review and provide early input to documents**
    - **Coordinate WIPT activities with the OIPT members**
    - **Resolve or elevate issues in a timely manner**
    - **Assume responsibility to obtain principals' concurrence on issues, as well as with applicable documents or portions of documents**

T&E WIPT Charter (Continued)

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- **Six operating principles for implementing success-oriented WIPTs:**

- **CHARTERING, LAUNCH, INITIATION**

  Getting teams off to a good start is critical. Key activities include charter preparation, conducting WIPT training, and preparing a POA&M. When combined, these activities contribute to early and sustained success.

- **GOAL ALIGNMENT**

  The team leader should ensure the goals and objectives of team members are consistent with project goals and objectives. An effective mechanism to provide performance feedback to team members and their functional organization should be established.

- **OPEN DISCUSSIONS WITH NO SECRETS**

  Each member brings to the team unique expertise that needs to be recognized by all. Because of that expertise, each person's views are important in developing a successful program, and these views need to be heard. Teams must have full and open discussions with no secrets. *Cooperation is essential!*

T&E WIPT Charter (Continued)

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- **Six operating principles for implementing success-oriented WIPTs (Continued):**

- **EMPOWERED, QUALIFIED TEAM MEMBERS**

  Empowerment is critical to making and keeping the agreements essential to effective WIPTs. All representatives assigned to WIPTs at all levels must be empowered by their leadership. They must be able to speak for their superiors, the "principals," in the decision-making process.

- **DEDICATED/COMMITTED PROACTIVE PARTICIPATION**

  Consistent team participation by people with institutional knowledge of the functional areas is necessary for success. Therefore, WIPTs should be organized to allow all stakeholders to participate and right sized to the issue. Membership should be limited to the minimum essential to enhance communication and trust. Other organizations may be added as required based on the needs of the program. Contractor participation shall be in accordance with Service/Agency guidance.

- **ISSUES RAISED AND RESOLVED EARLY**

  Team members should openly raise and discuss issues at the earliest possible opportunity. The WIPT should try to resolve issues within the WIPT, seeking additional functional expertise when necessary. In the spirit of teaming and cooperation, issues should not be worked "off-line" beyond the purview of the IPT. When an issue cannot be resolved within the WIPT, the PM should raise the issue as quickly as possible to a decision-making level where resolution can be achieved.

What are the T&E WIPT Organizational Relationships

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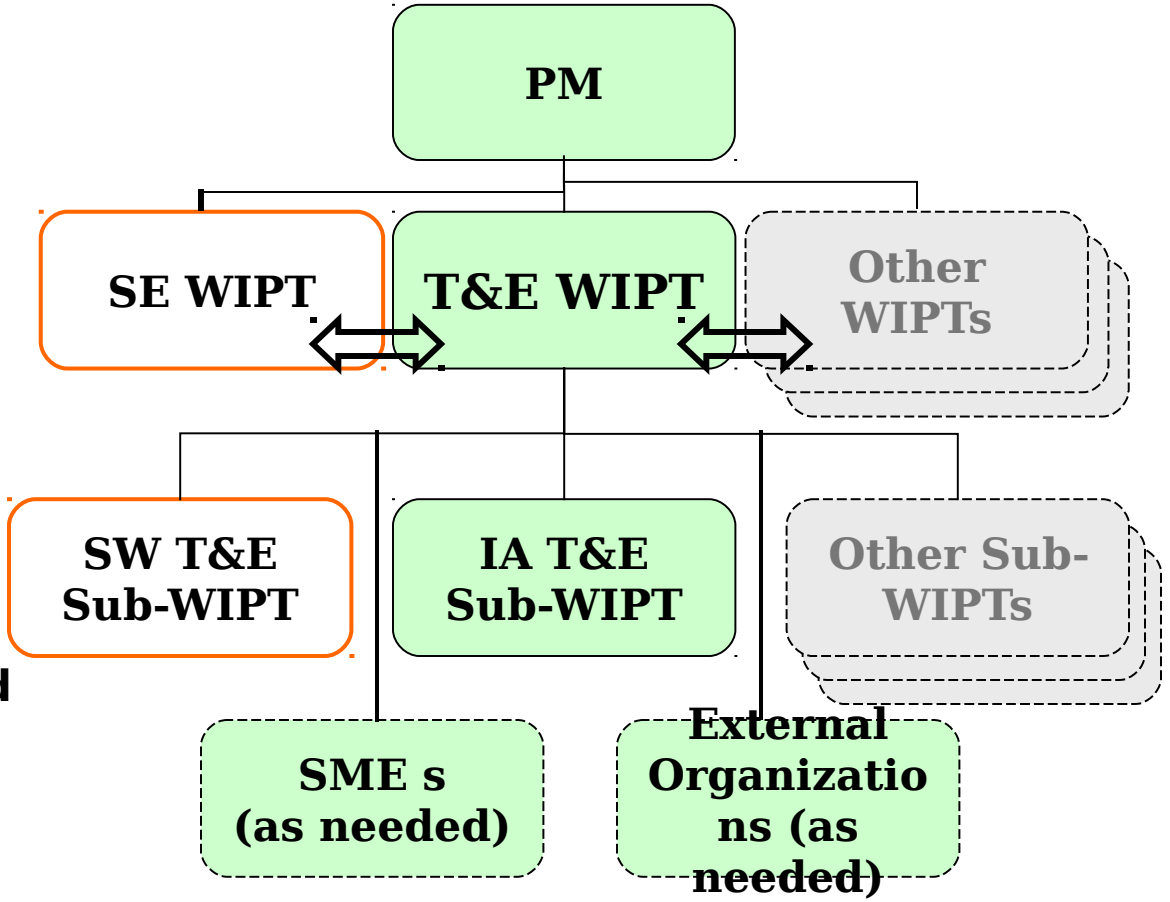
T&E WIPT organizational relations are both internally to the PMO, and externally to all the stakeholders regarding the T&E effort, plans, resources, and results reporting

External relationships include organizations involved in product/system certifications, ranges and laboratories, special functional requirements such as environmental, personnel and system safety standards and requirements, and the user community

- - - - as directed or needed



What are the T&E WIPT Products

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There are three primary T&E planning documents – TES, TEMP, and the Integrated T&E Schedule

Test and Evaluation Strategy (TES) at Milestone A:

- **For programs on the OSD T&E Oversight List, the TES shall be submitted to the OUSD(AT&L)DDR&E/DDT&E and the DOT&E for approval**
- **TES describes the overall approach for evaluating system capabilities and addresses test resource planning**
- **TES addresses Technology Development Phase evaluations, and the evaluation of system design concepts against the preliminary mission requirements resulting from the Analysis of Alternatives**
- **TES includes the T&E aspects of competitive prototyping, and demonstration of technologies in relevant environments.**
- **The Milestone A TES relies on the Initial Capabilities Document (ICD) as the basis for the evaluation strategy**

What are the T&E WIPT Products

Test and Evaluation Master Plan (TEMP) at Milestone B, C and Full-Rate Production:

- **MDAPs, MAIS Acquisition Programs, and programs on the OSD T&E Oversight List shall submit the initial TEMP to the OUSD(AT&L)DDR&E/DDT&E and the DOT&E for approval at MS B**
- **TEMP describes the overall structure, major elements, and objectives for the T&E program**
- **TEMP provides an integrated test schedule; and the resource requirements to accomplish the planned testing**
- **TEMP documents the IOT&E entrance criteria, to be used to determine IOT&E readiness**

What are the T&E WIPT Products

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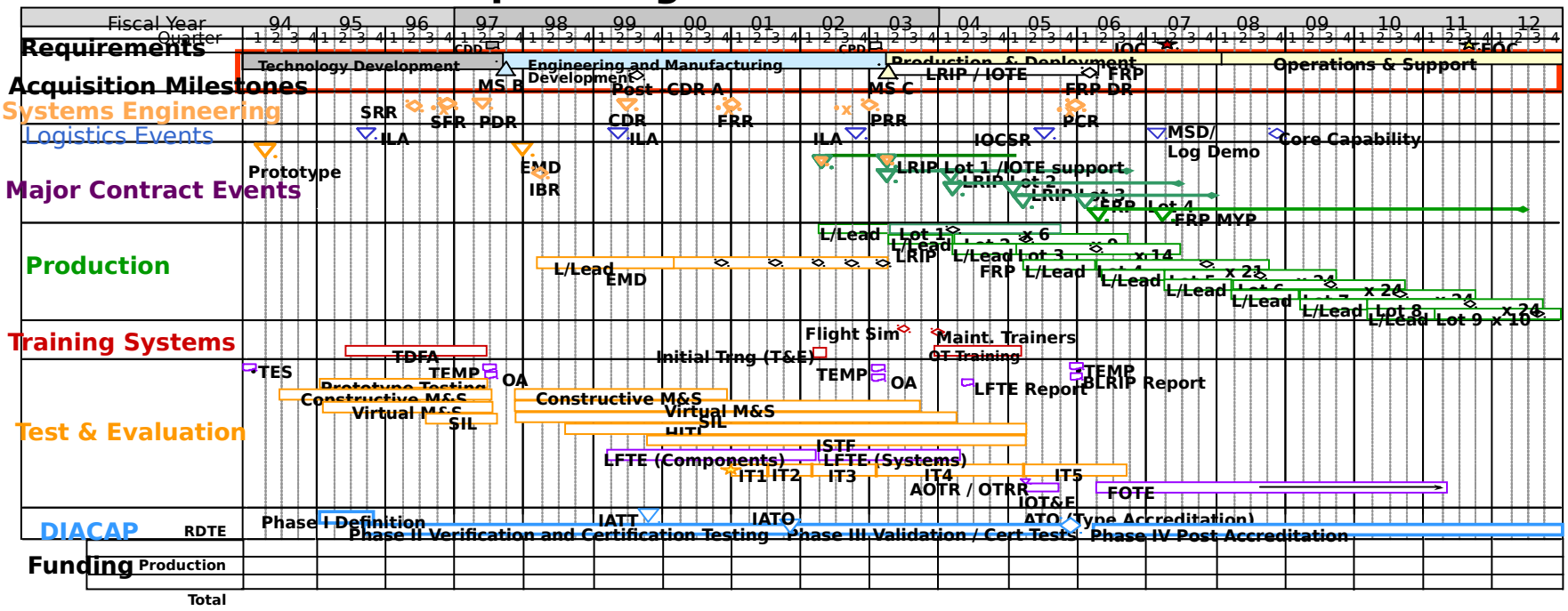
Sample Integrated Test Schedule



- **Dynamic schedule from TD through fielding**
- **Must be consistent with AS, program plan, and System Engineering Plan (SEP)**
- **Must be accurate in dates, events, and critical path sequencing**
- **Should be reviewed at every WIPT meeting**

References

- Service/Agency:
  - Army: AR 73-1; DA Pam 73-1; DA T&E Working-level IPT SMART BOOK
  - Navy: SECNAV 5000.2D, paragraph 2.3.1.2
  - Air Force: AFI 99-13; AF T&E Guidebook
  - DISA: DISA INSTRUCTION 640-195-4

- Other Guides:
  - DAG - Chapter 9
  - AT&L & NII - Rules of the Road: A Guide for Leading Successful Integrated Product Teams
  - DAU - T&E Management Guide

Point of Contact

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DT&E Website: http://www.acq.osd.mil/sse

Remember

The T&E WIPT is an Integral partner on the PM's Team

Any questions and recommendations regarding a T&E WIPT are welcomed